

* * * * * Welcome to STN International * * * * *

<u>NEWS 1</u>		Web Page URLs for STN Seminar Schedule - N. America
<u>NEWS 2</u>		"Ask CAS" for self-help around the clock
<u>NEWS 3</u>	Feb 24	PCTGEN now available on STN
<u>NEWS 4</u>	Feb 24	TEMA now available on STN
<u>NEWS 5</u>	Feb 26	NTIS now allows simultaneous left and right truncation
<u>NEWS 6</u>	Feb 26	PCTFULL now contains images
<u>NEWS 7</u>	Mar 04	SDI PACKAGE for monthly delivery of multifile SDI results
<u>NEWS 8</u>	Mar 24	PATDPAFULL now available on STN
<u>NEWS 9</u>	Mar 24	Additional information for trade-named substances without structures available in REGISTRY
<u>NEWS 10</u>	Apr 11	Display formats in DGENE enhanced
<u>NEWS 11</u>	Apr 14	MEDLINE Reload
<u>NEWS 12</u>	Apr 17	Polymer searching in REGISTRY enhanced
<u>NEWS 13</u>	AUG 22	Indexing from 1927 to 1936 added to records in CA/CAPLUS
<u>NEWS 14</u>	Apr 21	New current-awareness alert (SDI) frequency in WPIDS/WPINDEX/WPIX
<u>NEWS 15</u>	Apr 28	RDISCLOSURE now available on STN
<u>NEWS 16</u>	May 05	Pharmacokinetic information and systematic chemical names added to PHAR
<u>NEWS 17</u>	May 15	MEDLINE file segment of TOXCENTER reloaded
<u>NEWS 18</u>	May 15	Supporter information for ENCOMPPAT and ENCOMPLIT updated
<u>NEWS 19</u>	May 19	Simultaneous left and right truncation added to WSCA
<u>NEWS 20</u>	May 19	RAPRA enhanced with new search field, simultaneous left and right truncation
<u>NEWS 21</u>	Jun 06	Simultaneous left and right truncation added to CBNB
<u>NEWS 22</u>	Jun 06	PASCAL enhanced with additional data
<u>NEWS 23</u>	Jun 20	2003 edition of the FSTA Thesaurus is now available
<u>NEWS 24</u>	Jun 25	HSDB has been reloaded
<u>NEWS 25</u>	Jul 16	Data from 1960-1976 added to RDISCLOSURE
<u>NEWS 26</u>	Jul 21	Identification of STN records implemented
<u>NEWS 27</u>	Jul 21	Polymer class term count added to REGISTRY
<u>NEWS 28</u>	Jul 22	INPADOC: Basic index (/BI) enhanced; Simultaneous Left and Right Truncation available
<u>NEWS 29</u>	AUG 05	New pricing for EUROPATFULL and PCTFULL effective August 1, 2003
<u>NEWS 30</u>	AUG 13	Field Availability (/FA) field enhanced in BEILSTEIN
<u>NEWS 31</u>	AUG 15	PATDPAFULL: one FREE connect hour, per account, in September 2003
<u>NEWS 32</u>	AUG 15	PCTGEN: one FREE connect hour, per account, in September 2003
<u>NEWS 33</u>	AUG 15	RDISCLOSURE: one FREE connect hour, per account, in September 2003
<u>NEWS 34</u>	AUG 15	TEMA: one FREE connect hour, per account, in September 2003
<u>NEWS 35</u>	AUG 18	Data available for download as a PDF in RDISCLOSURE
<u>NEWS 36</u>	AUG 18	Simultaneous left and right truncation added to PASCAL
<u>NEWS 37</u>	AUG 18	FROSTI and KOSMET enhanced with Simultaneous Left and Right Truncation
<u>NEWS 38</u>	AUG 18	Simultaneous left and right truncation added to ANABSTR
<u>NEWS EXPRESS</u>	April 4	CURRENT WINDOWS VERSION IS V6.01a, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003
<u>NEWS HOURS</u>		STN Operating Hours Plus Help Desk Availability
<u>NEWS INTER</u>		General Internet Information
<u>NEWS LOGIN</u>		Welcome Banner and News Items
<u>NEWS PHONE</u>		Direct Dial and Telecommunication Network Access to STN
<u>NEWS WWW</u>		CAS World Wide Web Site (general information)

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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 15:57:41 ON 06 SEP 2003

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
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FILE 'CAPLUS' ENTERED AT 15:57:55 ON 06 SEP 2003

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FILE COVERS 1907 - 6 Sep 2003 VOL 139 ISS 11

FILE LAST UPDATED: 5 Sep 2003 (20030905/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s wo9614373/pn

L1 1 WO9614373/PN

=> d all

L1 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
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AN 1996:431573 CAPLUS

DN 125:61479

TI Oil mixture with stearin component for burning with a wick, process for producing the mixture, candle and other uses

IN Beringer-Schott, Lamai

PA Weimert, Martin, Germany

SO PCT Int. Appl., 21 pp.

CODEN: PIXXD2

DT Patent

LA German

IC ICM C11B001-00

ICS F21S013-00; F23D003-24; C11C005-00

CC 45-3 (Industrial Organic Chemicals, Leather, Fats, and Waxes)

Section cross-reference(s): 63

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9614373	A1	19960517	WO 1995-EP4366	19951106 <--

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g cg b

cg

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W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT
 RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

	<u>AU 9652595</u>	A1	19960531	<u>AU 1996-52595</u>	19951106
PRAI	<u>DE 1994-4439509</u>		19941108		
	<u>WO 1995-EP4366</u>		19951106		

AB A mixt. for burning with a wick contains ≥ 1 stearin component, in particular stearic acid, palmitic acid and/or wax, added to an oil. Optionally, a fragrance is added. A small amt. of the stearin component is added to the oil during heating; the fragrance in the form of an oil or flower blossoms, may be added before or after heating. The mixt. is heated in a container over the wick, and an optional water layer, to release the fragrance into the room. Optional additives are coloring agent and oil of cloves to repel insects. The candle and its manuf., and other uses of the mixt. are also claimed.

ST stearic acid oil candle; palmitic acid oil candle; wax oil candle; fragrance oil candle; coloring agent oil candle; clove oil candle insect repellent

IT Insect repellents
 (additive, oil of cloves; oil mixt. with stearin component for burning with a wick, process for producing the mixt., candle and other uses)

IT Coloring materials
 (additive; oil mixt. with stearin component for burning with a wick, process for producing the mixt., candle and other uses)

IT Waters, potable
 (bath and sauna, additive for; oil mixt. with stearin component for burning with a wick and other uses)

IT Leather
 (conditioner for; oil mixt. with stearin component for burning with a wick and other uses)

IT Oils
 RL: NUU (Other use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (oil mixt. with stearin component for burning with a wick and other uses)

IT Candles
 Odor and Odorous substances
 (oil mixt. with stearin component for burning with a wick, process for producing the mixt., candle and other uses)

IT Waxes and Waxy substances
 RL: MOA (Modifier or additive use); USES (Uses)
 (oil mixt. with stearin component for burning with a wick, process for producing the mixt., candle and other uses)

IT Furniture
 (chairs, insect repellent for; oil mixt. with stearin component for burning with a wick and other uses)

IT Essential oils
 RL: MOA (Modifier or additive use); USES (Uses)
 (clove, insect repellent additive; oil mixt. with stearin component for burning with a wick and other uses)

IT Cosmetics
 (lotions, oil mixt. with stearin component for burning with a wick and other uses)

IT Upholstery
 (seats, automotive, insect repellent for; oil mixt. with stearin component for burning with a wick and other uses)

IT 57-10-3, Hexadecanoic acid, uses 57-11-4, Octadecanoic acid, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (oil mixt. with stearin component for burning with a wick, process for producing the mixt., candle and other uses)

=> candle and (triglyceride or triacylglycerol or vegetable) and iodine
 CANDLE IS NOT A RECOGNIZED COMMAND
 The previous command name entered was not recognized by the system.
 For a list of commands available to you in the current file, enter
 "HELP COMMANDS" at an arrow prompt (=>).

=> s candle and (triglyceride or triacylglycerol or vegetable) and iodine
 2584 CANDLE
 2020 CANDLES
 3918 CANDLE
 (CANDLE OR CANDLES)
 32527 TRIGLYCERIDE
 34232 TRIGLYCERIDES
 55076 TRIGLYCERIDE
 (TRIGLYCERIDE OR TRIGLYCERIDES)
 7134 TRIACYLGLYCEROL
 4818 TRIACYLGLYCEROLS
 10238 TRIACYLGLYCEROL
 (TRIACYLGLYCEROL OR TRIACYLGLYCEROLS)
 69075 VEGETABLE
 22956 VEGETABLES
 80011 VEGETABLE
 (VEGETABLE OR VEGETABLES)
 121262 IODINE
 188 IODINES
 121332 IODINE
 (IODINE OR IODINES)
 L2 11 CANDLE AND (TRIGLYCERIDE OR TRIACYLGLYCEROL OR VEGETABLE) AND
 IODINE

=> d 12 1-11 all

L2 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
AN 2003:678926 CAPLUS	
TI Method for producing candles consisting of vegetable or animal oils or fats	
IN Tischendorf, Dieter	
PA Germany	
SO PCT Int. Appl., 29 pp. CODEN: PIXXD2	
DT Patent	
LA German	
IC ICM C11C005-00 ICS C11B015-00	
CC 45-3 (Industrial Organic Chemicals, Leather, Fats, and Waxes)	
FAN.CNT 1	
PATENT NO.	KIND DATE APPLICATION NO. DATE
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PI WO 2003070865	A1 20030828 WO 2003-EP1773 20030221
W: CA, RU, US	
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR	
PRAI DE 2002-10207258 A 20020221	
AB Paraffin- and stearin-free candles may be manuf. from natural (vegetable and/or animal) oils or fats, optionally contg. further additives such as colorants, by application of the liq. mixt. on a cooling medium such as on a roll cooler (4-12°; 4-12 rpm at 1-2 m diam.) or a spray drying tower, whereby it is transferred into a solid state forming homogeneous, coarsely cryst. particles, which are pressed into molds (at 80-150 bars). The oils and fats used are refined, having an iodine no.	

<1 to <10 and m.p. 40-80°, esp. 44-68°. No agglomeration effects of the **candle** material in a vacuum conveyor, and no size segregation were obsd.

- ST **candle** manuf press molding natural oil fat; **vegetable** animal oil fat
candle manuf avoiding agglomeration
- IT Fats and Glyceridic oils
 RL: TEM (Technical or engineered material use); USES (Uses)
 (animal; procedure for manuf. of **candles** consisting of
vegetable or animal oils or fats)
- IT Fats and Glyceridic oils
 RL: TEM (Technical or engineered material use); USES (Uses)
 (fish; procedure for manuf. of **candles** consisting of
vegetable or animal oils or fats)
- IT Molding
 (press; procedure for manuf. of **candles** consisting of
vegetable or animal oils or fats)
- IT **Candles**
 Coloring materials
 (procedure for manuf. of **candles** consisting of
vegetable or animal oils or fats)
- IT Linseed oil
 Palm kernel oil
 Palm oil
 Rape oil
 Safflower oil
 Soybean oil
 Sunflower oil
 RL: TEM (Technical or engineered material use); USES (Uses)
 (procedure for manuf. of **candles** consisting of
vegetable or animal oils or fats)
- IT Conveyors
 (vacuum system in; procedure for manuf. of **candles** consisting
 of **vegetable** or animal oils or fats)
- IT Fats and Glyceridic oils
 RL: TEM (Technical or engineered material use); USES (Uses)
 (**vegetable**; procedure for manuf. of **candles**
 consisting of **vegetable** or animal oils or fats)

L2 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
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AN 2003:585474 CAPLUS
 DN 139:135207
 TI Soybean wax **candles** based on hydrogenated soybean oil
 IN Anderson, Jill M.
 PA USA
 SO U.S., 7 pp.
 CODEN: USXXAM
 DT Patent
 LA English
 IC ICM C11C005-00
 NCL 044275000; 431288000
 CC 45-3 (Industrial Organic Chemicals, Leather, Fats, and Waxes)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6599334	B1	20030729	US 2000-752979	20001229
PRAI	US 2000-199505P	P	20000425		

AB A solid fuel **candle** which is highly adapted for use both in a container and also as a free-standing **candle**, includes at least 85 percent hydrogenated soybean oil, approx. 0 to 4 percent synthetic wax compn., approx. 0 to 4 percent of a second hydrogenated **vegetable** or petroleum oil, approx. 0 to 10 percent fragrance or scent, and approx. 0 to 3 percent dye. The hydrogenated **vegetable** oil most preferably has an

iodine value of approx. 50 and a m.p. of approx. 125 degrees Fahrenheit, with a free fatty acid content of less than one-tenth of one percent. The synthetic wax compn. is most preferably formed from alpha olefin monomers and oligomers under free radical conditions at relatively low pressures to yield a highly branched polymer wax having congealing and m.ps. lower than the starting alpha olefin material and a higher mol. wt.

ST **candles** hydrogenated soybean oil polyolefin wax
 IT Petroleum, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (Hydrogenated; soybean wax **candles** compn.)

IT Soybean oil
 RL: TEM (Technical or engineered material use); USES (Uses)
 (hydrogenated, Shurset 125, partially; soybean wax **candles** compn.)

IT Waxes
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
 (polyolefins; soybean wax **candles** compn.)

IT **Candles**
 Shortening
 (soybean wax **candles** compn.)

IT Petrolatum
 RL: TEM (Technical or engineered material use); USES (Uses)
 (soybean wax **candles** compn.)

IT Fats and Glyceridic oils, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (**vegetable**, hydrogenated; soybean wax **candles** compn.)

IT Polyolefins
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
 (wax; soybean wax **candles** compn.)

IT 188991-87-9, Vybar 260
 RL: TEM (Technical or engineered material use); USES (Uses)
 (soybean wax **candles** compn.)

RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE

- (1) Anon; HTTP://www.ilsoy.org/96news/candles.html 2000
- (2) Baumer; US 1958462 A 1934 CAPLUS
- (3) Calzada; US 6063144 A 2000 CAPLUS
- (4) Elharar; US 5338187 A 1994
- (5) Gaab; US 3772233 A 1973 CAPLUS
- (6) Garwood; US 2937129 A 1960 CAPLUS
- (7) Gibble; US 3758532 A 1973 CAPLUS
- (8) Guttman; US 3312648 A 1967 CAPLUS
- (9) Johnson; US 6214918 B1 2001 CAPLUS
- (10) Kidwell; US 4049893 A 1977 CAPLUS
- (11) Lin; US 5171329 A 1992
- (12) Lutz; US 3048551 A 1962
- (13) Miller; US 3645705 A 1972 CAPLUS
- (14) Moore; US 4008251 A 1977 CAPLUS
- (15) Morrison; US 5879694 A 1999 CAPLUS
- (16) Nurnberg; US 5766628 A 1998
- (17) Olund; US 3411855 A 1968
- (18) Russel; US 4239546 A 1980 CAPLUS
- (19) Seger; US 2551638 A 1951 CAPLUS
- (20) Smith; US 5849375 A 1998 CAPLUS
- (21) Spaulding; US 5843194 A 1998 CAPLUS
- (22) Spaulding; US 5871553 A 1999 CAPLUS
- (23) Tanikawa; US 249588 SD 1978
- (24) Taylor; US 4855098 A 1989 CAPLUS
- (25) Tench; US 2807524 A 1957 CAPLUS
- (26) Thomas; US 2290393 A 1942
- (27) Tsaras; US 3844706 A 1974

- (28) Will; US 1954659 A 1934 CAPLUS
 (29) Wilson; US 4614625 A 1986 CAPLUS
 (30) Wohl; US 5597300 A 1997
 (31) Woods; US 4060569 A 1977

L2 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
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AN 2003:117939 CAPLUS
 DN 138:155325
 TI **Vegetable fat-based candles**
 IN Tiffany, Tom; Sleeter, Ron; Widlak, Neil
 PA Archer Daniels Midland Company, USA
 SO PCT Int. Appl., 25 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM C11C005-00
 CC 45-3 (Industrial Organic Chemicals, Leather, Fats, and Waxes)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003012016	A1	20030213	WO 2002-US24500	20020802
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 2003046860	A1	20030313	US 2002-211966	20020802
PRAI	US 2001-309752P	P	20010802		

AB The invention provides a **candle** body compn., and a **candle** made therefrom, wherein the **candle** body compn. comprises at least about 51% of a **vegetable** fat having an **iodine** value of about 0 to about 80, preferably about 40 to about 80. The **vegetable** fat may comprises a partially or fully hydrogenated **vegetable** oil, such as soybean oil, palm oil, cottonseed oil, rapeseed oil and mixts. thereof. The **candle** body compn. may further comprise up to about 49% of one or more crystal modifiers, such as fully hydrogenate **vegetable** oils having an **iodine** value of about 1 to about 20, fatty acids, esters of fatty acids, and mixts. thereof. The invention includes a method of forming **candles** using the above-described **candle** body compn.

ST **vegetable fat candle**

IT Cottonseed oil

Palm oil

Rape oil

Soybean oil

RL: TEM (Technical or engineered material use); USES (Uses)
 (hydrogenated; **vegetable** fat-based **candles**)

IT **Candles**

(**vegetable** fat-based **candles**)

IT Fats and Glyceridic oils, uses

RL: TEM (Technical or engineered material use); USES (Uses)
 (**vegetable**, hydrogenated; **vegetable** fat-based **candles**)

IT Fats and Glyceridic oils, uses

RL: TEM (Technical or engineered material use); USES (Uses)
 (**vegetable**; **vegetable** fat-based **candles**)

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Aigi Rosoku Kk; JP 58201900 A 1983 CAPLUS
- (2) Alphonse, D; GB 859771 A 1961
- (3) Baumer, N; US 1958462 A 1934 CAPLUS
- (4) Francisco, C; US 6063144 A 2000 CAPLUS
- (5) Jaspers, M; DE 4242509 A 1994
- (6) Johnson, C; US 6214918 B1 2001 CAPLUS
- (7) Kameyama Rosoku Kk; JP 58217597 A 1983 CAPLUS
- (8) Lin, G; TW 373019 A 1999
- (9) Tao, B; US 2001013195 A1 2001

L2 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
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AN 2003:58683 CAPLUS
 DN 138:124204
 TI **Vegetable** oil-based wax compositions from **triglycerides** and fatty acids
 IN Murphy, Timothy A.
 PA USA
 SO U.S. Pat. Appl. Publ., 8 pp.
 CODEN: USXXCO
 DT Patent
 LA English
 IC ICM F23D003-16
 ICS C10L005-00; C10L007-00; C11C005-00
 NCL 431288000; 044275000
 CC 45-3 (Industrial Organic Chemicals, Leather, Fats, and Waxes)
 Section cross-reference(s): 5, 62

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003017431	A1	20030123	US 2002-92341	20020305
PRAI	US 2001-273647P	P	20010306		

AB **Candles** formed from **vegetable** oil-based wax are provided. The wax includes a **triacylglycerol** component and a fatty acid component, preferably ~50 to 65% of the **triacylglycerol** component and ~35 to 50% of the fatty acid component. The fatty acid component commonly includes at least ~90% palmitic acid and stearic acids. The **triacylglycerol** component may have a m.p. of ~57°. to ~63°. and/or an **Iodine** Value of ~35 to ~45. Methods of producing the **candles** from the **vegetable** oil-based wax are also provided.

ST **vegetable** oil wax **triglyceride** fatty acid palmitic stearic **candle**

IT Fatty acids, processes
 RL: PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
 (C14-18, Hystrene 4516; **vegetable** oil-based wax compns. from **triglycerides** and fatty acids)

IT Glycerides, processes
 RL: OCU (Occurrence, unclassified); PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); OCCU (Occurrence); PROC (Process); USES (Uses)
 (C16-18 and C16-18-unsatd., oleic content increased by hydrogenation; **vegetable** oil-based wax compns. from **triglycerides** and fatty acids)

IT Glycerides, processes
 RL: PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
 (C16-18, in **vegetable** oils; **vegetable** oil-based wax compns. from **triglycerides** and fatty acids)

IT Fatty acids, processes
 RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP

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(Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(blends with **vegetable triglycerides**;

vegetable oil-based wax compns. from **triglycerides** and fatty acids)

IT Wicks

(for **candles**; **vegetable** oil-based wax compns. from **triglycerides** and fatty acids)

IT Soybean oil

RL: PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(hydrogenated, partially hydrogenated and bleached; **vegetable** oil-based wax compns. from **triglycerides** and fatty acids)

IT Canola oil

Corn oil

Cottonseed oil

Olive oil

Palm oil

Peanut oil

Safflower oil

Sunflower oil

RL: PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(hydrogenated; **vegetable** oil-based wax compns. from **triglycerides** and fatty acids)

IT Candles

Coloring materials

Insect repellents

(**vegetable** oil-based wax compns. from **triglycerides** and fatty acids)

IT Waxes

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(**vegetable**, blends of **vegetable triglycerides** and fatty acids; **vegetable** oil-based wax compns. from **triglycerides** and fatty acids)

IT Fats and Glyceridic oils, processes

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(**vegetable**, blends with fatty acids, **Iodine No.** 35-45; **vegetable** oil-based wax compns. from **triglycerides** and fatty acids)

IT Fats and Glyceridic oils, processes

RL: PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(**vegetable**, hydrogenated, including bleached and refined; **vegetable** oil-based wax compns. from **triglycerides** and fatty acids)

IT Perfumes

(wax flakes or prills; **vegetable** oil-based wax compns. from **triglycerides** and fatty acids)

IT 57-10-3, Palmitic acid, processes

RL: PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(**vegetable** oil-based wax compns. from **triglycerides** and fatty acids)

Full Text	Citing References
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AN 2003:15921 CAPLUS
 DN 138:57815
 TI **Triacylglycerol based candle wax**
 IN Murphy, Timothy A.
 PA Cargill, Inc., USA
 SO U.S., 11 pp.
 CODEN: USXXAM
 DT Patent
 LA English
 IC ICM C11C005-00
 NCL 044275000; 431288000
 CC 45-3 (Industrial Organic Chemicals, Leather, Fats, and Waxes)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	<u>US 6503285</u>	B1	20030107	<u>US 2001-854138</u>	20010511
	<u>US 2003110683</u>	A1	20030619	<u>US 2002-284272</u>	20021030
PRAI	<u>US 2001-854138</u>	A1	20010511		

AB **Candles** formed from **triacylglycerol**-based wax are provided. The wax generally has a m.p. of about 130 to 145° F. (circa 54 to 63° C.). The wax includes a **triacylglycerol** component and a polyol partial ester component. Examples of suitable polyol partial esters include fatty acid monoesters of glycerol and/or sorbitan. The **triacylglycerol**-based wax typically has an **Iodine** Value of about 20 to 40. The wax commonly includes at least about 70 wt. % of the **triacylglycerol** component and about 3 to 30 wt. % of the polyol partial ester component. The **triacylglycerol** component generally has a fatty acid compn. which includes about 50 to 70 wt. % satd. fatty acids and about 30 to 45 wt. % 18:1 fatty acids. Methods of producing the **candles** from the **vegetable** oil-based wax are also provided.

ST **triacylglycerol based candle wax**

IT Waxes

RL: TEM (Technical or engineered material use); USES (Uses)
 (**candles; triacylglycerol based candle wax**)

IT Fatty acids, uses

RL: TEM (Technical or engineered material use); USES (Uses)
 (esters, glycerol or sorbitan; **triacylglycerol based candle wax**)

IT Palm oil

Soybean oil

RL: TEM (Technical or engineered material use); USES (Uses)
 (hydrogenated; **triacylglycerol based candle wax**)

IT Glycerides, uses

RL: TEM (Technical or engineered material use); USES (Uses)
 (**triacylglycerol based candle wax**)

IT Fats and Glyceridic oils, uses

RL: TEM (Technical or engineered material use); USES (Uses)
 (**vegetable, wax; triacylglycerol based candle wax**)

IT **Candles**

(wax; **triacylglycerol based candle wax**)

IT 9002-88-4, Vybar 103 26658-19-5, Sorbitan tristearate

RL: TEM (Technical or engineered material use); USES (Uses)
 (**triacylglycerol based candle wax**)

RE.CNT 58 THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS RECORD

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- (6) Beardmore; US 4118203 A 1978 CAPLUS
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tml](http://www.purdue.edu/UNS/html4ever/9611.Schweitzer.candles.html) 1996
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nr/98fps/fpspix/930.html](http://www.admin.ces.purdue.edu/anr/98fps/fpspix/930.html) 1998
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- (40) Roeske; US 20020005007 A1 2002 CAPLUS
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- (45) Schuppan; US 6099877 A 2000 CAPLUS
- (46) Sinwald; US 5753015 A 1998 CAPLUS
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- (48) Starks; US 6106597 A 2000 CAPLUS
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L2 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
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AN 2002:833158 CAPLUS

DN 137:339928

h eb c g cg b cg

eb

TT Hydrogenated **vegetable** oils with defined C18:1 and C18:0 fatty acid profiles as alternatives to paraffin waxes for **candles**
 IN Murphy, Timothy A.; Doucette, Melinda Kae; House, Nathaniel C.; Richards, Michael L.
 PA USA
 SO U.S. Pat. Appl. Publ., 11 pp., Cont.-in-part of U.S. Ser. No. 543,929, abandoned.
 CODEN: USXXCO
 DT Patent
 LA English
 IC ICM C10L005-00
 NCL 044275000
 CC 52-1 (Electrochemical, Radiational, and Thermal Energy Technology)
 Section cross-reference(s): 45

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002157303	A1	20021031	US 2001-877716	20010608
PRAI	US 2000-519812	B2	20000306		
	US 2000-543929	B2	20000406		

AB **Candles** using triacylglycerides as alternatives to paraffin waxes comprise triacylglyceride stock with a m.p. of 40-45° and which have a fatty acid profile that includes ≤25 wt.% C<18-fatty acids, a fatty acid profile with ≤25 wt.% stearic acid, ≥60 wt.% C18:1 (monounsaturated C18) fatty acids, a solid fat index at 10° (SFI-10) of 40-60 wt.% (preferably 43-48 wt.%), a solid fat index at 40° (SFI-40) of 1-15 wt.%, and an **iodine** no. of 60-75. The triacylglyceride basestock is a refined bleached hydrogenated **vegetable** oil, selected from hydrogenated soybean oil, cottonseed oil, sunflower oil, canola oil, corn oil, olive oil, peanut oil, and safflower oil. The wax compn. can also include com. palmitic acid (contg. 43.0 wt.% C16-fatty acids and 52.8 wt.% C18-fatty acids).
 ST **candle** wax hydrogenated **vegetable** oil; soybean oil hydrogenated **candle** wax
 IT Fatty acids, uses
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (C16 and C18, hydrogenated; hydrogenated **vegetable** oils with C18:1 and C18:0 fatty acid profiles as alternatives to paraffin waxes for **candles**)
 IT Glycerides, uses
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (C18 and C18-unsaturated, hydrogenated; hydrogenated **vegetable** oils with C18:1 and C18:0 fatty acid profiles as alternatives to paraffin waxes for **candles**)
 IT Waxes
 RL: IMF (Industrial manufacture); PRP (Properties); PREP (Preparation)
 (glyceride-based; hydrogenated **vegetable** oils with C18:1 and C18:0 fatty acid profiles as alternatives to paraffin waxes for **candles**)
 IT **Candles**
 (hydrogenated **vegetable** oils with C18:1 and C18:0 fatty acid profiles as alternatives to paraffin waxes for **candles**)
 IT Canola oil
 Corn oil
 Cottonseed oil
 Olive oil
 Peanut oil
 Safflower oil
 Soybean oil
 Sunflower oil
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (hydrogenated; hydrogenated **vegetable** oils with C18:1 and

C18:0 fatty acid profiles as alternatives to paraffin waxes for **candles**)

IT Diglycerides

Glycerides, uses

Monoglycerides

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(**vegetable**-oil monoglycerides and diglycerides, hydrogenated; hydrogenated **vegetable** oils with C18:1 and C18:0 fatty acid profiles as alternatives to paraffin waxes for **candles**)

IT Glycerides, uses

Monoglycerides

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(**vegetable**-oil, hydrogenated; hydrogenated **vegetable** oils with C18:1 and C18:0 fatty acid profiles as alternatives to paraffin waxes for **candles**)

IT 57-10-3P, Palmitic acid, uses

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(hydrogenated **vegetable** oils with C18:1 and C18:0 fatty acid profiles as alternatives to paraffin waxes for **candles**)

L2 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
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AN 2002:778371 CAPLUS

DN 137:281658

TI Non-sooting **candles** fabricated from paraffin waxes and saturated fatty alcohols, fatty acids, and **triglycerides**

IN Bertrand, Jerome C.; Adams, Charles Sullivan; Phillips, Brian Charles

PA USA

SO U.S. Pat. Appl. Publ., 10 pp., Cont.-in-part of U.S. Ser. No. 755,644. CODEN: USXXCO

DT Patent

LA English

IC ICM C10L005-00

NCL 044275000

CC 51-11 (Fossil Fuels, Derivatives, and Related Products)

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002144455	A1	20021010	US 2001-36825	20011108
	US 2002005007	A1	20020117	US 2001-755644	20010106
PRAI	US 2001-755644	A2	20010106		
	US 2000-179767P	P	20000202		
	US 2000-670181	A	20000925		

AB Soot-free **candles** contain one or more fatty materials (e.g., satd. (C12-18) fatty alcs., free satd. fatty acids, and/or satd. **triglycerides**, as well as paraffin waxes, all with a low iodine no. (.ltorsim.12.5, preferably <1)). The **candles** can contain substantially no paraffins, or can contain 30-90 wt.% paraffin waxes. The use of low-iodine-no. long-chain compds. and in the proper component percentages results in low-soot or soot-free compns. that can be blended with paraffins, if desired, to create very stable, non-sooting or low-sooting **candles**.

ST nonsooting **candle** paraffin wax fatty acid alc glyceride

IT Alcohols, uses

RL: TEM (Technical or engineered material use); USES (Uses)

(C12-18, satd.; non-sooting **candles** fabricated from paraffin waxes and satd. fatty alcs., fatty acids, and **triglycerides**)

IT **Candles**

(non-sooting **candles** fabricated from paraffin waxes and satd. fatty alcs., fatty acids, and **triglycerides**)

IT Paraffin waxes, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (non-sooting **candles** fabricated from paraffin waxes and satd.
 fatty alcs., fatty acids, and **triglycerides**)

IT Fatty acids, uses
 Glycerides, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (satd.; non-sooting **candles** fabricated from paraffin waxes
 and satd. fatty alcs., fatty acids, and **triglycerides**)

IT Palm oil
 RL: TEM (Technical or engineered material use); USES (Uses)
 (stearins; non-sooting **candles** fabricated from paraffin waxes
 and satd. fatty alcs., fatty acids, and **triglycerides**)

IT 57-10-3, Hexadecanoic acid, uses 57-11-4, Stearic acid, uses 143-07-7,
 Dodecanoic acid, uses 544-63-8, Tetradecanoic acid, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (non-sooting **candles** fabricated from paraffin waxes and satd.
 fatty alcs., fatty acids, and **triglycerides**)

L2 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
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AN 2002:51827 CAPLUS
 DN 136:120914
 TI Non sooting paraffin containing **candle**
 IN Roeske, Alfred D.; Bertrand, Jerome C.
 PA USA
 SO U.S. Pat. Appl. Publ., 8 pp.
 CODEN: USXXCO
 DT Patent
 LA English
 IC ICM C10L005-00
 NCL 044275000
 CC 51-12 (Fossil Fuels, Derivatives, and Related Products)
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002005007	A1	20020117	US 2001-755644	20010106
	US 2002144455	A1	20021010	US 2001-36825	20011108
PRAI	US 2000-179767P	P	20000202		
	US 2000-670181	A	20000925		
	US 2001-755644	A2	20010106		

AB Substantially soot free **candles** that incorporate paraffin and fatty
 material (hydrogenated **triglycerides** (TG) and/or free fatty acids (FFA))
 that has a low Iodine Value (IV). The use of low IV fatty material and
 proper component percentages results in low soot or soot free **candles**.
 Paraffin/TG, paraffin/TG/FFA and paraffin/FFA **candles** are disclosed as
 are appropriate component percentages and/or IV values to achieve desired
 low or non sooting characteristics.

ST nonsooting paraffin **candle triglyceride** fatty acid
 IT Glycerides, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (hydrogenated; non sooting paraffin contg. **candle**)

IT **Candles**
 (non sooting paraffin contg. **candle**)

IT Paraffin waxes, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (non sooting paraffin contg. **candle**)

IT Fatty acids, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (plant material; non sooting paraffin contg. **candle**)

L2 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
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AN 1996:548846 CAPLUS

DN 125:193957

TI Effect of temperature, light and gamma irradiation on quality of some common edible oils

AU Ahmad, Taufiq; Sattar, Abdus; Atta, Shaheen

CS Nucl. Inst. Food Agric., Peshawar, Pak.

SO Science International (Lahore) (1995), 7(4), 597-598
CODEN: SINTE8; ISSN: 1013-5316

PB Publications International

DT Journal

LA English

CC 17-9 (Food and Feed Chemistry)

AB Effect of temp., light and gamma irradiation was tested on some common edible oils e.g. soybean, sunflower, corn and palm products (palm olein and palm stearin). One set of samples was exposed to continuous fluorescent light (100 ft-candles) at ambient temps. (30-35°C) while the other was kept in the refrigerator. Detn. of peroxide and cholesterol values at successive intervals for a period of 5 mo revealed that there was a significant increase in peroxide values of the samples exposed to fluorescent light at room temp. than those in the refrigerator. Palm olein showed the greatest stability with mean POV 73.44 meq/kg followed by corn, sunflower and soybean oils with mean POV values of 105.37, 115.2 and 128.6 meq/kg resp. after 5 mo storage. A slight increase was noted in cholesterol % for both the storage conditions, but smallest increase was noted in palm olein samples. Treatment of palm products to irradiation (2.5-10.0 kGy) showed a regular increase in POV for palm olein (9.4 meq/kg to 13.0 meq/kg) and palm stearin (17.48 to 22.7 meq/kg). However, a clear decreasing trend was observed in the iodine values of these palm products on exposure to gamma irradiation.

ST temp gamma radiation light vegetable oil

IT Gamma ray
Temperature effects, biological
(effect of temp., light and gamma radiation on quality of some common edible oils)

IT Corn oil
Soybean oil
Sunflower oil
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(effect of temp., light and gamma radiation on quality of some common edible oils)

IT Peroxides, formation (nonpreparative)
RL: FMU (Formation, unclassified); FORM (Formation, nonpreparative)
(effect of temp., light and gamma radiation on quality of some common edible oils)

IT Palm oil
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(oleins, effect of temp., light and gamma radiation on quality of some common edible oils)

IT Fats and Glyceridic oils
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(vegetable, effect of temp., light and gamma radiation on quality of some common edible oils)

IT 57-88-5, Cholesterol, biological studies
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(effect of temp., light and gamma radiation on quality of some common edible oils)

L2 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2003 ACS on STN

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Full Text	Citing References
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AN 1937:14765 CAPLUS
 DN 31:14765
 OREF 31:2034f-h
 TI Chinese Stillingia oil
 AU Ko, Tsung-Huo
 SO Chemistry (China) (1936), 3, 909-22
 DT Journal
 LA Unavailable
 CC 27 (Fats, Fatty Oils, Waxes, and Detergents)
 AB Stillingia sebifera, widely grown along the Yangtze River in China, yields 2 kinds of oils of com. value: Chinese **vegetable** tallow from the mesocarp, and Stillingia oil from the kernel of the fruit, the former having been used for **candle** making in China for a long time and recently also in soap manuf. Stillingia oil, which is less useful, has been used as an adulterant for tung oil. It is similar to tung oil in properties and has a higher **iodine** value, but its drying properties are far less favorable compared to those of tung oil. The occurrence of the plant and the pressing and utilization of Stillingia oil are described, together with a detailed study of its properties.

IT Oils
 (stillingia, mixt. with **vegetable** tallow)

L2 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
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AN 1909:3849 CAPLUS
 DN 3:3849
 OREF 3:728c-i,729a
 TI Irvingia Butter
 AU Bontoux, Emile
 SO Matieres Grasses (1909), Volume Date 1908, (No. 8), 1276-8
 CODEN: MGRAAN; ISSN: 0368-9999
 DT Journal
 LA Unavailable
 CC 27 (Fats, Fatty Oils, and Soap)
 AB This **vegetable** "butter" or fat comes from the almonds of two Indo-Chinese trees of the family Rutaceae or Irvingiae; especially the Irvingia oliveri (I. harmandiana); and in Cambodge, the I: malayana olio. A tree of the same family growing on the west coast of Africa produces dika butter. The Irvingiae flower in April; the fruit matures in July or August and is an oval drupe with fibrous mesocarp and woody endocarp; the size is that of a lemon, but the ripe fruit after losing its outer skin is a large almond-size. The pulp prepared from the kernels is twice extracted with steam and pressed. The fatty matter is allowed to cool, if intended for **candles**, in bamboo tubes provided with wicks. The press-cake is used for fodder, fertilizer or fuel. Five kg. nuts yield 1 kg. almonds and 430 g. butter. Vignoli erroneously stated that this fat contained 30.2% oleic and 68.5% solid fatty acids, including stearic. Heckel considered the fatty acids to be 30% myristic and 70% lauric. The author examined two samples of the butter made in Cochin China (II and III) and one prepared by himself in the laboratory from the fruit (I). Sample I was whitish, with acid number 0.86; sample II cream color, acid number 23.5; sample III, pink, acid number 34.9. The acidity is not excessive, considering the age of the samples, indicating good keeping qualities. Other properties are as follows: Fat.; Sample I., Sample II., Sample III.; d4040....., 0.0133, 0.9128, 0.9130; Freezing point....., 31°, 31.2°, 31-8°; Melting point (capillary)....., 39.7, 38.2, 38.4; Unsaponifiable matter....., 0.42%, 0.16%, 0.19%; Saponification number....., 235.3, 236.3, 237.4; **Iodine** number....., 6.7-6.8, 4.1-4.2, 4.9-5.1; Reichert-Meissl number....., 0.62, 0.75, 0.70; Fatty Acids.; Insoluble unsaponifiable

acids....., 94%, 93.4%, 93.2%; Titer....., 36.6, ..., 36.4
 ;Melting point....., 38.8, ..., 39; Neutralization
 number....., 250.2, ..., 253.0; Mean molecular
 weight....., 224, ..., 222; The methyl esters of the fatty acids were
 prepared and isolated by fractional distillation according to Heller's
 method; from the results of this test the comp. of the butter is given as
 5% olein, 30-35% laurin and 60-65% myristin, and it is thus similar to
 dika butter. The production is small at present, for though the butter
 makes excellent **candles** and white soap and is suitable for chocolate
 making or as edible **vegetable** butter, the great bulk of the fruit makes
 it hard to handle.

IT Fats
 (irvingia butter)

=>